REMARKS

This is a full and timely response to the Office Action mailed October 19, 2006, submitted concurrently with a three month Extension of Time to extend the due date for response to April 19, 2007.

By this Amendment, claims 1, 3 and 5 have been amended to more particularly define the present invention. Support for the claim amendments can be found throughout the specification and the original claims, see, for example, page 2, last three lines, and page 13, line 9, of the specification as well as all Examples of page 22 and Comparative Examples of page 23 of the specification. Thus, claims 1, 3 and 5 remain pending in this application.

In view of these amendments, Applicant believes that all pending claims are in condition for allowance. Reexamination and reconsideration in light of the above amendments and the following remarks is respectfully requested.

Rejections under 35 USC § 102 and § 103

Claims 1, 3 and 5 are rejected under 35 U.S.C. §102(e) and §103(a) in view of Spencer et al. (U.S. Patent 6,663,704) and Vondruska (U.S. 2004/0170587). Applicant respectfully traverses these rejections.

To constitute anticipation of the claimed invention under U.S. practice, the prior art reference must literally or inherently teach each and every limitation of the claims. Further, to establish a *prima facie* case of obviousness, the following three criteria must be satisfied. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. Here, in this case, both Spencer et al. and Vondruska fails to teach or suggest all the claim limitations with particular emphasis on the limitations "*oil-based ballpoint-pen ink composition*", "*a solvent consisting essentially of an organic solvent*", "*wherein said organic solvent comprises not less than 50% by weight of an organic solvent having a vapor pressure of about 665 to 6650Pa (5.0 to 50 mmHg) and being one or more solvents selected from the group consisting of aliphatic monohydric alcohols*", and "*wherein said organic solvent having the vapor pressure of about 665 to 6650Pa (5.0 to 50 mmHg) is selected from the group consisting of n-propyl alcohol, isopropyl alcohol and ethyl alcohol*".

In the present application, the claimed ballpoint-pen ink composition is an oil-based ink composition in which the solvent comprised therein does not essentially include water (i.e. "*oil-based*" and "*a solvent consisting essentially of an organic solvent*"). Applicant respectfully requests the Examiner to review the compositions of all the Examples and Comparative Examples on pages 22 and 23 of the specification. As the Examiner will see, all of the Examples in the specification do not include water as a solvent.

In contrast, Spencer et al. teaches an ink composition which comprises an aqueous solvent system in which water is the primary solvent (see column 10, lines 59-60, of Spencer et al.). Although the aqueous solvent in Spencer et al. can include water-soluble organic solvent(s) for inhibiting drying and preventing freezing of the ink, the amount of the water-soluble organic solvent is limited to significantly less than 50% of the solvent. Spencer et al. states that "*[T]ypically, the pearlescent ink includes from 1 percent by weight to 40 percent by weight of a water-soluble organic solvent. Preferably, the pearlescent ink includes 5 percent by weight to 30 percent by weight of a water-soluble organic solvent. Most preferably, the pearlescent ink includes about 8 percent by weight to 25 percent by weight of a water-soluble organic solvent.*" (See column 10, line 66, to column 11, line 5, of Spencer et al.). This is due to the fact that "*[I]f too much water-soluble organic solvent is added to the pearlescent ink, the written marks take longer to dry, have worse erasability, exhibit poorer writing characteristics (uneven line intensity), and the solubility of the shear-thinning agent in the formulation may be affected*" (see column 11, lines 5-10, of Spencer et al.)

Although it is stated in column 11, lines 13-15, of Spencer et al. that "*the ratio of water to water-soluble organic solvent is from about 0.5 part to about 25 parts water per part of organic solvent(s)*", Spencer et al. also states that the ratio of water to water-soluble organic solvent is **preferably** from "*about 1 part to about 20 parts water per part of organic solvent(s)*" and **most preferably**, from "*about 2 parts to about 10 parts water per part of organic solvent(s)*". The preference for a greater than 50% water to water-soluble organic solvent ratio is due to the fact that higher amount of water lead to "*better erasability and writing characteristics such as even laydown and line intensity*" (see column 11, lines 19-23).

Thus, from the teachings in Spencer et al., it is clear that the reference does not teach or suggest *an oil-based ballpoint-pen ink composition comprising a solvent which consists essentially of an organic solvent.*

It should also be noted that Applicant has further amended the claims to distinguish from the teachings of Spencer et al. Specifically, Applicant has amended the organic solvent of the present claims to exclude the organic solvents exemplified in Spencer et al. (See column 11, lines 22-26, of Spencer et al.). More specifically, Applicant has amended claim 1 to delete "*glycol aliphatic ethers*" and claim 3 to substitute "*propylene glycol monomethyl ether*" for "*ethyl alcohol*" (See table 1 on page 22 of the specification).

Still further, these deficiencies in the teachings of Spencer et al. are not cured by the teachings and suggestions of Vondruska. Vondruska only discloses acrylic polymers but does not disclose nor suggest the combination of acrylic polymers with the specifically claimed organic solvent(s) in the present invention. One skilled in the art would not be motivated to arrive at such a combination since both Spencer et al. and Vondruska fail to teach or suggest the problems associated with conventional oil based ink compositions (for a ballpoint pen) and how such combination of the specifically claimed organic solvent(s) and acrylic polymers overcomes the problems.

Applicant also strongly disagrees with the Examiner's conclusion that the solvent of Spencer et al. would inherently possess the vapor pressure claimed in the present invention. Under U.S. case law, in relying upon the theory of inherency, the Examiner *must provide a basis in fact and/or technical reasoning* to reasonably support the determination that the allegedly inherent characteristic (i.e. "*a vapor pressure of about 665 to 6650Pa (5.0 to 50 mmHg)*") necessarily flows from the teachings of the applied prior art. In other words, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. It should be noted that inherency may not be established by probabilities or possibilities. The mere fact that a certain result or characteristic **may** occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re* Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Since Applicants have clearly established in the comments above why the ink compositions disclosed in Spencer et al. are ink compositions comprising an aqueous solvent and are therefore not identical to the *oil-based ballpoint-pen ink compositions comprising a solvent (consisting essentially of an organic solvent) of the present invention*, the Examiner cannot *provide a basis in fact and/or technical reasoning* to reasonably support that the ink composition of Spencer et al. inherently possesses "*a vapor pressure of about 665 to 6650Pa (5.0 to 50 mmHg)*. This is due to the fact that the vapor pressure of the present invention (i.e. *about 665 to 6650Pa (5.0 to 50 mmHg)*) can only be achieved when the organic solvents of the present application are employed in combination with other organic solvent(s) of the present application (see Examples in the specification). The vapor pressure cannot be achieved when the organic solvents of the present application are employed in combination with water as in Spencer et al.

Thus, for these reasons, these rejections can no longer be sustained and should be withdrawn.

CONCLUSION

For the foregoing reasons, all of the claims now pending in the present application are believed to be clearly patentable over the outstanding rejections. Accordingly, favorable reconsideration of the claims in light of the above remarks is courteously solicited. If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

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Respectfully submitted,

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